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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,960	05/04/2005	Wen Zhao	PAT 799W-2	8081

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EXAMINER

LY, NGHI H

ART UNIT PAPER NUMBER

2617

DATE MAILED: 06/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/533,960	<b>Applicant(s)</b> ZHAO ET AL.	
	<b>Examiner</b> Nghi H. Ly	<b>Art Unit</b> 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2-10 and 12-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-10 and 12-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 2-6, 9, 10, 12-16, 18 and 21-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Hunzinger et al (US 6,501,947).

Regarding claims 12 and 21, Hunzinger teaches a method of automatically re-establishing a data connection on a wireless data network (see column 4, lines 37-40 and see Abstract), comprising: determining a data connection status upon the expiry of a service check timer automatically transmitting a connection request if the data connection is determined to be lost (see column 2, lines 22-29, see "*timer*" and "*after a failed connection*", also see column 4, lines 8-16, see "an initial attempt to connect has failed" or column 4, lines 17-21, see "*the mobile station 106 was unable to communicate with the base station*" or see "*if the connection with the base station 104 is unsuccessful*"), and re-establishing the data connection if the transmitted connection request is accepted by the wireless data network (see column 2, lines 42-55).

Regarding claims 2 and 22, Hunzinger further teaches the wireless data network is a CDMA2000 network (see Abstract).

Regarding claim 3, Hunzinger further teaches determining that no data connection is established includes receiving a refusal of service message from the wireless data network (see column 2, lines 30-42).

Regarding claim 4, Hunzinger further teaches the refusal of service message is a retry order (see column 2, lines 30-42).

Regarding claim 5, Hunzinger further teaches the refusal of service message is a reorder order (see column 2, lines 30-42).

Regarding claim 6, Hunzinger further teaches the refusal of service message is an intercept message and the connection request is automatically transmitted upon detection of a new wireless data network (see column 2, lines 30-42).

Regarding claims 9 and 15, Hunzinger further teaches initializing the back off timer is based on a retry delay specified by the retry order (see column 6, lines 41-56).

Regarding claim 10, Hunzinger further teaches the back off timer is initialized to a time greater than or equal to the retry delay (see column 6, lines 41-56).

Regarding claim 13, Hunzinger further teaches determining the data connection status is preceded by initializing the service check timer (see column 4, lines 37-51).

Regarding claim 14, Hunzinger further teaches the step of automatically transmitting the connection request is performed upon expiry of a back off timer (see column 4, lines 37-51).

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Regarding claim 16, Hunzinger further teaches determining the data connection status includes comparing assigned network resources to default values (see column 2, lines 10-21).

Regarding claim 18 and 25, Hunzinger further teaches a step of forcing premature expiry of the service check timer upon receipt of a Release Order (see column 4, lines 37-40).

Regarding claim 23, Hunzinger further teaches the connection manager includes means to reset the back off timer in response to the receipt of a Retry Order, such that the back off timer is greater than, or equal to, a retry delay specified in the Retry Order (see column 4, lines 37-51).

Regarding claim 24, Hunzinger further teaches the connection manager includes an accumulator for tracking consecutive rejections of service, and means to reset the back off timer in accordance with the number of consecutive rejections (see column 2, lines 30-42).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

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the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hunzinger et al (US 6,501,947) in view of Marry et al (US 4,827,507).

Regarding claim 7, Hunzinger teaches claim 14. Hunzinger does not specifically disclose initializing the back off timer is based on a random seed.

Marry teaches initializing the back off timer is based on a random seed (see column 12, lines 1-21).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Marry into the system of Hunzinger in order to protect the exchange of keys and synchronization from interruptions in the communication channel (see Marry, column 2, lines 24-26).

Regarding claim 8, Hunzinger further teaches the back off timer is initialized to a time greater than or equal to any back off timer time calculated after a last established data connection (see column 4, lines 37-51).

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6. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hunzinger et al (US 6,501,947) in view of Hunzinger (US 2002/0082032A1).

Regarding claim 20, Hunzinger et al (US 6,501,947) teaches claim 12. Hunzinger et al (US 6,501,947) does not specifically disclose the connection request is an Origination Message.

Hunzinger (US 2002/0082032A1) teaches the connection request is an Origination Message (see [0007]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Hunzinger (US 2002/0082032A1) into the system of Hunzinger et al (US 6,501,947) in order to allow the infrastructure to adapt access parameter to increase or decrease the likelihood of successful access (see Hunzinger (US 2002/0082032A1), Abstract).

7. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hunzinger et al (US 6,501,947).

Regarding claim 17, Hunzinger teaches claim 16 except that the step of comparing includes determining that no data connection is established when an assigned Internet Protocol address is set to 0.0.0.0.0. However, such Internet Protocol address is set to 0.0.0.0.0. would have been obvious since the particular Internet Protocol address could have been determined by the inventor's choice e.g., use an Internet Protocol address which can improve reconnection attempts in the communication network.

8. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hunzinger et al (US 6,501,947) in view of Official notice.

Regarding claim 19, Hunzinger teaches claim 18 except that the Release Order is a Point-to-point-protocol termination request. However, the Examiner takes Office notice that such feature as recited in the claim is very well known in the art.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Hunzinger for providing a method as claimed, for obtaining reconnection in communication network.

### ***Response to Arguments***

9. Applicant's arguments filed 03/29/06 have been fully considered but they are not persuasive.

On pages 6, 7 and 8 of applicant's remarks, applicant argues that Hunzinger does not teach a service check timer, and *"a service check timer ensures that a connection of a service is checked at minimum fixed intervals while a back of timer ensures that a connection request is re-issued if the connection request has been previously rejected. These respective functions are clearly described at least at paragraph 23 of the corresponding Patent Application Publication No. 20062G63544"*.

In response, Hunzinger does indeed teach a service check timer (see column 2, lines 22-29 and column 2, lines 42-55, see "timer setting circuit" and it reads on applicant's "a service check timer") and *paragraph 23 of the corresponding Patent*



*Application Publication No. 20062G63544* as indicated by the applicant does not disclose “a back of timer ensures that a connection request is re-issued if the connection request has been previously rejected. The paragraph 23 of the corresponding Patent Application Publication No. 20062G63544 merely disclose “If the connection request message is rejected connection manager 156 sets back off timer (BOT) 152, to a value preferably determined by a random seed. Upon expiry of BOT 152, connection manager 156 re-issues a connection request in the form of an Origination Message”).

In addition, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., “a service check timer ensures that a connection of a service is checked at minimum fixed intervals while a back of timer ensures that a connection request is re-issued if the connection request has been previously rejected”) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

On page 8 of applicant's remarks, applicant argues that no suggestion to combine the references.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the

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references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation to do so found in the references themselves in order to protect the exchange of keys and synchronization from interruptions in the communication channel (see Mary, column 2, lines 24-26) and in order to allow the infrastructure to adapt access parameter to increase or decrease the likelihood of successful access (see Hunzinger (US 2002/0082032A1), Abstract).

On page 8 of applicant's remarks, applicant argues that Marry does not teach a service check timer.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In this case, Hunzinger does indeed teach a service check timer (see column 2, lines 22-29 and column 2, lines 42-55, see "timer setting circuit" and it reads on applicant's "a service check timer") and the combination of Hunzinger and Marry does indeed teach applicant's claimed limitation. In addition, applicant's attention is directed to the rejection of claims 7 and 8 above.

On pages 8 and 9 of applicant's remarks, applicant argues that Hunzinger does not teach a method of automatically re-establishing a data connection on a wireless

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data network comprising steps of determining a data connection status upon the expired of a service check timer...”.

In response, Hunzinger does indeed teach a method of automatically re-establishing a data connection on a wireless data network (see column 4, lines 37-40 and see Abstract), comprising: determining a data connection status upon the expiry of a service check timer automatically transmitting a connection request if the data connection is determined to be lost (see column 2, lines 22-29, see “*timer*” and “*after a failed connection*”, also see column 4, lines 8-16, see “an initial attempt to connect has failed” or column 4, lines 17-21, see “*the mobile station 106 was unable to communicate with the base station*” or see “*if the connection with the base station 104 is unsuccessful*”), and re-establishing the data connection if the transmitted connection request is accepted by the wireless data network (see column 2, lines 42-55).

In addition, in response to applicant's arguments, the recitation “*a method of automatically re-establishing a data connection on a wireless data network*” has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

***Conclusion***

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi H. Ly whose telephone number is (571) 272-7911. The examiner can normally be reached on 8:30 am-5:30 pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nghi H. Ly



CHARLES APPIAH  
PRIMARY EXAMINER